Title (en)

METHOD FOR SUBSTITUTING TRITIUM IN TRITIUM-CONTAINING WATER, AND TRITIUM ELIMINATION METHOD

Title (de)

VERFAHREN ZUM ERSETZEN VON TRITIUM IN TRITIUMHALTIGEM WASSER UND TRITIUMELIMINATIONSVERFAHREN

Title (fr)

PROCÉDÉ DE SUBSTITUTION DU TRITIUM DANS DE L'EAU CONTENANT DU TRITIUM ET PROCÉDÉ D'ÉLIMINATION DU TRITIUM

Publication

EP 3165276 A4 20180110 (EN)

Application

EP 15815163 A 20150703

Priority

- JP 2014138149 A 20140703
- JP 2015069299 W 20150703

Abstract (en)

[origin: EP3165276A1] Provided is a tritium substitution method having a process (101) of adding an organic substance including at least one of an organic acid, an organic acid alkali salt, a water-soluble amino acid, an organic acid to which a water-soluble amino acid alkali salt is added, an organic acid alkali salt, a water-soluble amino acid, and a water-soluble amino acid alkali salt, to radioactive substance-contaminated water containing tritium, a tritium substitution process (103) of circulating (102) fine bubbles in the contaminated water in which the organic substance has been added to cause a reaction of substituting hydrogen in the ± position of a carboxylic acid group by tritium through an interface of the fine bubbles to produce a tritium-substituted product.

IPC 8 full level

B01D 59/28 (2006.01); **B01J 20/18** (2006.01); **B01J 20/20** (2006.01); **B01J 20/22** (2006.01); **G21F 9/06** (2006.01)

CPC (source: EP US)

B01D 59/28 (2013.01 - EP US); **B01J 20/18** (2013.01 - EP US); **B01J 20/20** (2013.01 - EP US); **B01J 20/22** (2013.01 - EP US); **B01J 20/28016** (2013.01 - EP US); **C02F 9/00** (2013.01 - US); **G21F 9/06** (2013.01 - EP US); **G21F 9/10** (2013.01 - US); **G21F 9/12** (2013.01 - US); C02F 1/24 (2013.01 - US); C02F 1/28 (2013.01 - US); C02F 1/5236 (2013.01 - US); C02F 1/54 (2013.01 - US); C02F 11/008 (2013.01 - US); C02F 2101/006 (2013.01 - US); C02F 2305/04 (2013.01 - US)

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DOCDB simple family (application)

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